UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,498	09/24/2001	Masakazu Tanaka	12-008	7238

23400 7590 02/04/2004

POSZ & BETHARDS, PLC
11250 ROGER BACON DRIVE
SUITE 10
RESTON, VA 20190

EXAMINER	
WRIGHT, WILLIAM G	

ART UNIT	PAPER NUMBER
1754	

DATE MAILED: 02/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/960,498	TANAKA ET AL.	
	Examiner	Art Unit	
	William G. Wright SR.	1754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 October 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16 and 18-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16 and 18-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 28 OCT. 2003
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. § 102(b) as being anticipated by Uchikawas et al. '221.

The teaching of a protecting layer on the catalyst is found in claims 8, 9 and 16. The teaching of a ceramic substrate coated with a catalyst and then coated with a protecting layer is found at column 1 line 28 et seq. This teaching is to the protecting of platinum catalysts by a protecting layer of metal oxide. The applicant's arguments on the teachings not referenced in the applied art are in view of the above citation to the protecting layers is not well taken and the rejection is maintained. The Figure 3(c) teaches a protecting layer at No. 44 and reference is made to this at column 8 line 24 et seq.

Claims 18-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by Deeba et al. '848.

The teaching of a catalyst trap is found at column 1 line 20 and in claims 1-5 as well as in the claims and in the Abstract.

The teaching of a ceramic carrier is taught at column 14 line 39, Example 1 of column 17 line 36. The teaching of cordierite as a substrate is found at column 4 line 14, column 5 line 33 and at claim 2 of column 25 line 43. These teachings disclose very well the use of a ceramic support. These teachings show the support to be coated with catalyst at column 4 line 27 et seq. and at column 5 line 5 et seq. The applicant's arguments on the lack of teachings of ceramic supports with catalyst on the support are in view of the above cited teachings of the applied reference.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the

inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 1-16 and 18-32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Beauseigneur et al. '570 in view of Deeba et al. '848 and Uchikawas et al. '221.

Beauseigneur teaches in an automotive exhaust gas catalyst the features of a ceramic substrate, noble metals and microcracks. These teachings are found in the Abstract.

Beauseigneur fails to teach the specific use of an anti-evaporation layer, a catalyst trap and the specific requirement of a defect in a constituent element in the substrate.

Deeba teaches the concept of a catalyst trap for the use of effective reduction of nitrogen oxides, note the Summary of the Invention at column 3 et seq. of the reference. Uchikawas teaches in a gas detecting apparatus catalytic effects at column 6 line 15 et seq. where nitrogen oxides, carbon monoxide and hydrocarbon fragments are all chemically altered in an exhaust gas system. The chemical elements in contact with the gas stream are the same as in the instant claims. Uchikawas also teaches a protecting layer in claim 16. The specific use of elements that

cause a defect in the ceramic substrate are noted at column 1 line 68 et seq.

The instant claimed invention is taught to be obvious from the disclosures of the reference combination. All of the references are to gas treating compositions and have a utility in the exhaust gas treatment area as does the instant case. The features of a catalyst trap, an anti-evaporation layer and the claiming of a defect in a constituent element of the support are features found in the supporting references. With the combining of the supporting references with the Beauseigneur reference, the claimed invention is obvious.

Applicant argues that the colloidal particles of Beauseigneur are not catalyst particles but rather are essentially oxide particles in which a catalyst is disposed. The instant claim 1 claims catalyst particles and no distinction is seen between the catalyst of the reference and the instant claims. The applicant further argues that the Uchikawas reference is not analogous art. The teaching of the presence of a nitrogen oxide reducing catalyst is found in the Abstract of the reference. The teaching of the use of the detecting apparatus in the gas stream of an internal combustion engine is found at column 1 line 10 et seq. The teachings for a nitrogen oxide reduction catalyst found in an exhaust gas stream. The teaching of a ceramic support and a protecting layer for the

catalyst is found in column 1 line 28 et seq. With these teachings the argument that Uchikawas is not analogous art is not persuasive.

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ 2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 18-32 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of copending application Serial No. 09/961,203. Although the conflicting claims are not identical, they are not patentably distinct from each other because they overlap in scope of subject matter claimed.

This is a *provisional* obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The NO_x absorbent trap is found in the claims of the applied application and NO_x occluding feature is taught in the instant specification at page 30 line 30 et seq.

Applicant's arguments filed October 28, 2003 have been fully considered but they are not deemed to be persuasive.

Each response by the applicant has been answered in each of the foregoing statements by the Examiner in support of the rejections maintained. The applicant's arguments are not persuasive.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE

STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William G. Wright, Sr. whose telephone number is (703) 305-7792. The examiner can normally be reached on Monday through Thursday from 6:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on (703) 308-3837. The fax phone number for the organization where this application or proceeding is assigned are (703) 872-9306 for the regular communications and (703) 872-9311 for after final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1495.

WGW SR

W. G. Wright, Sr.:cdc

January 5, 2004

STEVEN BOS
PRIMARY EXAMINER
GROUP 1100